THE CORRECT NAME OF THE YAUPON

BY

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During a recent conversation with me regarding the nomenclature of the yaupon, Professor Oakes Ames called my attention to a precious remark which Dillenius once wrote in a letter to Linnaeus (Smith, J. E.: "A selection of the correspondence of Linnaeus and other naturalists" 2 (1821) 96). "We all know the nomenclature of Botany to be an Augean stable, which C. Hoffman, and even Gesner, were unable to cleanse." Nothing could be more expressive of the confusion which one encounters in the synonymy of this holly than the term "Augean stable."

There has long been a need for a thorough discussion of the correct name of the yaupon, the source of the black-drink once so commonly used as a ceremonial emetic and stimulant amongst Indians of the southeastern part of the United States.

The monographer of the Aquifoliaceae, Loesener (Monogr. Aquifol. in Nova Acta Acad. C. L. C. G. Nat. Cur. 78 (1901)) employed the binomial Ilex caroliniana (Lam.) Loes. Most modern taxonomic treatments, however, use Ilex vomitoria [Soland. in] Ait.

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Notwithstanding this tendency in botanical works, a most baffling confusion and uncertainty still exists throughout the numerous chemical, pharmacological, anthropological and ethnobotanical publications and hampers understanding and accuracy. In view of the lack of any adequate review of the taxonomic and nomenclatorial history of this plant since 1753, it has seemed advisable to present the following notes in an attempt to set forth the reason why the correct, though not the earliest, name is *Ilex vomitoria* and to discuss the origin, status and significance of the synonymy of this binomial.

Ilex vomitoria [Solander in] Aiton Hort. Kew. [ed. 1] 1 (1789) 170.

I. Cassine β Linnaeus Sp. Pl. 1 (1753) 125.

Cassine Paragua Miller Gard. Dict. [ed. 8] (1768) Cassine no. 2. Non Cassine Peragua Linnaeus Sp. Pl. [ed. 2] (1762) 384. Non Cassine Peragua Linnaeus Mant. 2 (1771) 220.

C. caroliniana Lamarck Dict. 1 (1783) 652, pro parte, I. Cassine Walter Fl. Carol. (1788) 241.

I. ligustrina Jacquin Collect. 4 (1790) 105; Icon. Rar. 2 (1793) 9, t. 310.

Casine yapon Bartram Travels (1791) 259, nom. nud.

I. floridana Lamarck III. 1 (1791) 356.

I. Cassena Michaux Fl. 2 (1803) 229.

I. religiosa Barton Fl. Virg. (1812) 66.

? Cassine ramulosa Rafinesque in Robin Fl. Lud. (1817) 110.

Hierophyllus Cassine (Walt.) Rafinesque Med. Bot. 2 (1830) 8.

? Cassine amulosa Rafinesque Med. Fl. 2 (1830) 205, nom. sphalm.

Ageria Cassena (Michx.) Rafinesque Sylv. Tellur. (1838) 47.

? Emetila ramulosa Rafinesque in S. Watson Bibl. Ind. N. Am. Bot. (1878) 158, nom. in syn.

Cassine yaupon Gatschet in Trans. St. Louis Acad. Sci. 5 (1888) 88, nom. nud.

I. Peragua (L.) Trelease in Trans. Acad. Sci. St. Louis 5 (1889) 346, in obs.

I. caroliniana (Lam.) Loesener in Bot. Centralbl. 47 (1891) 163.

I. vomitoria [Soland. in] Aiton var. Yawkeyii Tarbox Some Nat. Hollies in Brookgreen Gardens (1944) 19, sine diagn. lat.

Cassine vomitoria Swanton in Bull. Bur. Am. Ethnol. 137 (1946) 284, nom. nud.

Perhaps the earliest widespread reference to the yaupon in a botanical publication was made by Bauhin and Cherler in their encyclopaedic "Historia plantarum universalis" 3 (1651) 631. No description of the plant was given. The title, "Herba Cassiana, famen sitimque retardans," of the brief discussion, which reported the use of the infusion of the leaves as a stimulant, referred to the hunger-allaying properties of the shrub. This reference is an elaboration of an earlier report by Bauhin (Pinax (1623) 170), based upon what appears to be the first account of the black-drink (Nuñez Cabeça de Vaca "Relación y comentarios. . . . " (1542) cap. 26), herein reproduced (Plate XXIV).

Later, Leonard Plukenet described the species as Cassine vera Floridanorum Arbuscula baccifera Alternati ferme facie, foliis alternatim sitis, tetrapyrene ("Opera omnia botanica" 3 (1691) 40) and published what is apparently the earliest illustration (loc. cit. 4 (1692) t. 376, f. 2). No mention seems to have been made of the use of the plant.

It is to Mark Catesby ("The natural history of Carolina, Florida and the Bahama Islands" 2 (1754) 57) that we are indebted for the first definite and convincing iden-

tification of the source of the black-drink which, for 235 years previously, had been attracting the attention of travellers. This was accomplished through Catesby's charming plate and his description of Plukenet's Cassine vera Floridanorum Arbuscula baccifera Alternati ferme facie, foliis alternatim sitis, tetrapyrene, together with a very lengthy account of the properties and ceremonial uses of the plant.

The earliest tenable post-Linnaean name for the yaupon is found in volume one of the first edition of Aiton's "Hortus Kewensis" (1789). It was here named *Ilex vomitoria*. The specific epithet would indicate that Solander, who described the plant, was familiar with its renown as an emetic, although he made no mention of this in his notes. The original description is short: "I. foliis alternis distantibus oblongis obtusiusculis crenato-serratis: serraturis muticis."

It will be noted that Miller's Cassine Paragua, (1768) referring, without any doubt, to the concept now under consideration, antedates Ilea vomitoria. We must investigate the reasons for the untenability of Miller's binomial, because of the almost unbelievable confusion of his specific epithet and Linnaeus' several concepts—all named Cassine Peragua or the orthographic variant C. Paragua. Notwithstanding the unavailability of the epithet Peragua, the combination under Ilex has been made. We must realize, however, that the author did not urge its acceptance. Trelease, although he accepted Ilex Cassine Walt. as the correct name for the yaupon holly, wrote in a footnote (in Trans. Acad. Sci. St. Louis 5 (1889) 346, in obs.): "An effort to improve on the nomenclature of this species, unless it is called I. Cassine β L. Sp. (1753) 125, would probably cause it to stand as I. Peragua (L.) = Cassine Peragua L. Mantiss. (1771), ii, 200. '

In 1762, Linnaeus (Sp. Pl. [ed. 2] 1 (1762) 384) published Cassine Peragua for an Old World concept. He cited several sources which indicate that the concept was unquestionably an Old World one. Although one of these sources (Hortus Cliffortianus (1737) 72) attributed the plant both to the Cape of Good Hope and to Carolina, it is clear that it was not being confused with the concept now known as Ilex vomitoria which was discussed separately (loc. cit. 40) and was attributed to "Carolina Americae."

Cassine Peragua was published again by Linnaeus nine years later (Mant. 2 (1771) 220). In this second Linnaean publication, it referred not to the Old World concept of the earlier (1762) Cassine Peragua but to several different concepts.

Linnaeus' Cassine Peragua of 1771 has hitherto been considered by some taxonomists as a synonym of Ilex vomitoria, either wholly or in part. There has been much uncertainty as to the exact meaning of this name, because, in the Linnaean Herbarium, there are two distinct American plants under the binomial. Loesener (in Engler Bot. Jahrb. 28, 2 (1900) 154-155) considered Cassine Peragua L. of 1771 as a nomen nudum. Fernald and Schubert (in Rhodora 50 (1948) 169) hold it to be a nomen ambiguum and a nomen confusum and suggest that it be permanently rejected. Photographs of the two specimens indicate that neither is referable to Ilex vomitoria; both are species of Viburnum (Fernald and Schubert loc. cit.). Therefore, whether Cassine Peragua L. of 1771 be rejected or not, there is no need of considering further the name in any discussion of the synonymy of Ilex vomitoria. Trelease's combination, Ilex Peragua is untenable since it is based on a homonym.

Cassine Paragua Miller (Gard. Dict. [ed. 8] (1768) Cassine No. 2), on the contrary, is very definitely referable to

EXPLANATION OF THE ILLUSTRATION

PLATE XXIV. The earliest European account of the use of the black-drink was written by Nuñez Cabeça de Vaca and published in his "Relación y commentarios. . . . " of which there have been several editions. The illustration is a photograph of the account as it appears in the first edition of 1542. Of this rare and fascinating book only two copies are known: an imperfect copy preserved in the British Museum; and a perfect one in the New York Public Library, through the kind cooperation of which institution the photograph herein reproduced was made available.

thrrase embourachan covn humo y vaquato tienen por el. beuen tambien otra cola q sacan ve las hojas oclos arboles como de enzina y tuestanla en puos bo tes al suego-y vespues q la tienen tostada binchen el bote ve agua rassilotien en sobre el fuego-r quando ha peruido vos vezes echan le en vna vasija a está en friandola con media calabaça: y quando esta con mucipa espuma beuen la tan caliente quanto pueden suffrir: y vesde que la sacan vel bote hasta que la beuen es stan vando bozes viziendo que quien quiere beuer. P quando las mugeres oven eitas bozes luego se paran sin osar se mudar-y avng esten mucho cargadas no os san hazer otra cosa. y sia caso alguna vellas se mueue la vespontran tia van ve palos-y con muy gran enojo verraman el agua que tienen para beuer: a la que an beuidola toznan a lançar lo qual ellos hazen muy lige ramente rsin pena algua. la razon vesta costumbre va ellos-y vizen. Que si quado ellos quieren beuer aque lla agualas mugeres se mueuen de donde les toma la boz que en aquella agua se les mete enel cuerpo vna cosumala y q védea poco les haze mozir. y todo el tie poqelagua esta coziendo a ve estar el bote atapado Psia caso esta vesatapado y alguna muger passa lo ve rramā y no beuen mas ve a glla agua-es amarilla. y es stan beuiendola tres vias sin comer: y cada via beue cada pno arroba y media vella. E gndo las mugeres está có su costumbre no buscan ve comer mas ve para si solas porquinguna otra persona come velo que ella trae. Enel tiépo q assi estaua entre estos pi pna viablu

EXPLANATION OF THE ILLUSTRATION

PLATE XXV. The plant which was the source of the black-drink was definitely identified in 1754 by Mark Catesby, as evidenced by this beautiful illustration from his "The natural history of Carolina, Florida and the Bahama Islands" 2 (1754) 57.

